

obtained, ensilage supplies the solution of the difficulty. On such land tares can be grown profitably; and, with care, but not without, they can be preserved for winter use as an excellent and very nourishing substitute for turnips. Again, take a suburban dairy farm, practically all grass, and up to the present time dependant upon purchased mangels, cabbages, and other succulent food, which will enable the cows to be kept profitably through the winter; now the system of ensilage enables the suburban farmer to make a portion of his grass into a succulent and stimulating food, yielding more milk and costing far less money than the roots he was formerly obliged to purchase. Lastly, I will indicate an arable farm in the southern and south-eastern counties, where feeding a large head of stock is the great object. On such a farm, immediately after harvest, a portion of the stubbles can be sown with rye or winter vetches, reaped in April or May, and preserved in silos; then a crop of roots, tares, or even maize can be sown, the roots to be used as hitherto during the winter, and the other green crops after having been pitted in the autumn. In all these cases it seems to me that the loss of nutritive matter, which is one result of the processes of fermentation, is of very small importance in comparison with the practical advantages of ensilage, and the element of security which it contains."

I will take the liberty of summing up the practical side of the question by a quotation from one of my correspondents—Mr. Arthur H. Grant, of Abbotswood, Romsey, Hampshire, as it exactly expresses my views in terms that I could scarcely improve:—"Ensilage is good, very good indeed, as a system, but it is not an easy and universal mode of salvation to the farmer; and it demands common sense, care, and attention, but it saves in money, time, and anxiety."—*Agricultural Gazette*

The *Amherst Gazette* reports that Warden Wilson has subscribed \$25 and J. T. Smith, Esq., for the Southampton Woollen Co., \$20, to the Amherst Exhibition fund; that the committee has selected an admirable site for the exhibition building, which will be about 80 ft. square and 30 ft. posts; that tenders are called for erecting the building, etc.; and that the premium list now under consideration, is of wide scope, and will give our farmers and manufacturers a good chance.

An Arbor Society has been formed in Charlottetown, and the streets and squares planted with maples, birches, elms, oaks, chestnut, ash, butternut and black walnut trees.

## SIMPLE RULES IN BUTTER MAKING,

As Recommended by Professor Sheldon, of the College of Agriculture, Devonton, Salisbury, England, and demonstrated by him at the Working Dairy in the Centennial Show, St. John, N. B., October, 1883.

It appears to me that good butter can be made almost anywhere by almost any person, providing natural facilities are at hand, proper utensils are provided, and ordinary attention is paid to the details of the process. I do not say that the finest butter can thus be produced at ease, for to specially excel seems to be the reward of genius in butter making as in everything else; but good butter, butter that will win approval wherever it goes, can certainly be produced where now only an inferior article appears, if due care be taken. And I may say, further, that the volume of care required is not by any means difficult to learn or irksome to practice, but that, on the contrary, it is just as simple and easy as the careless ways of unsuccessful people. Butter has to be made somehow, by everyone who makes it, and the difference in the "how" makes all the difference in the butter. Bearing in mind that the work has to be done, it is well to remember that everything that is worth doing at all is worth doing well, and specially is this true when to do it well is just as easy as to do it badly, and far more satisfactory.

It is a slight on good milk that bad butter should be made from it; it is an insult, too, to the cow that gives the milk—the cow who has done her part of the contract well; it is anything but complimentary to the public who are invited to eat the butter, as if to say they have no such thing as delicacy of taste; it is, also, anything but creditable to any one to turn out such stuff, and a loss to the producer as well as to the consumer. Many butter-makers wonder how it is that they realize poor prices for the butter they have to sell; yet it is at the same time true that the public never object to pay good prices for a good article.

The best butter-makers in America command from 70 to 100 cents a pound all the year round; the worst of them are down to the 'teens, or in the twenties at most; and the difference is the reward of the careful man or the careful woman as the case may be.

The first thing to do is to take proper care of the milk. Assuming that it is cleanly taken from the cow into a clean pail, it should be put into clean pans, in a clean room, whose temperature should not vary beyond reasonable limits the year round, say from 50 degrees to 70 degrees. The room should be clean, I say, and it should be outside the influence of impure odors; the last because

milk absorbs such odors and reproduces them in the butter. I may mention here that cows should have food which does not communicate an unpleasant taint to the milk they give; should there be any such taint in the milk or odor in the room, a pinch of saltpetre in the milk will go far to checkmate them. But in any case, taint or no taint, odor or no odor, it is of the first importance that milk rooms should be kept clean, should be limewashed occasionally to sweeten them, and should be swilled tolerably often to remove dirt and other "matter out of place" from the floors. The utensils should be scalded each time after being used for milk, scalded with boiling water, rinsed with a solution of soda, and afterward with clean, pure water. The room should be well ventilated, and only with pure air, and the windows should be screened so that no strong ray of light shall fall on the milk—this last because light develops the fermentive organisms which lead to the chemical decomposition of milk. Thus in milk-rooms cleanliness, ventilation, and regulation of light, are matters of importance.

The foregoing paragraph refers to dairies in which the centrifugal cream-separator has not yet found a place, and to the shallow-pan system of milk-setting particularly. To the deep-can system, and specially to the Cooley system, they refer only generally, as I would have them refer to any dairy whatever. I may say here that the best of butter may be made on any of the three systems of cream-raising—the shallow-pan, the deep-can or Cooley, and the centrifugal separator—providing care and intelligence are employed. The Separator is, of course, adapted only to large dairies of fifty cows or so, or to creameries; and it requires either steam or water as the motive power. A horse will drive it, and I have seen one drive it, but a horse is not to be depended on for a steady, sustained, and regular supply of power. The chief advantages of the Separator are that the cream can be got from the milk while both are new and sweet, that less of it is left in, and that fewer utensils are required in the dairy. Perfectly fresh butter from perfectly new milk may be thus obtained, if desirable; but the best authorities now consider that we get better butter from cream that has had time to mellow and ripen, rather than from fresh cream, because the latter is more or less insipid. But in any case, cream should be skimmed whilst it is quite sweet, and, no matter how long it is kept before churning, it should not be allowed to go sour. To let cream go sour is to injure the flavor and quality of the butter, if not to diminish its quantity. To churn it while it is too young, as one may say is to produce a pure flavored,